Application No.: 09/155,452

Docket No.: SHP-0002

AMENDMENT TO THE CLAIMS, COMPLETE LISTING OF CLAIMS IN ASCENDING ORDER WITH STATUS INDICATOR

Claims 1-54 (Canceled).

- 55. (Currently Amended) A process for making hybrid yeast cells with recombined DNA sequences comprising:
- (a) mutating a first set of haploid yeast cells to render defective the enzymatic mismatch repair system of the first set of cells and introducing a first DNA sequence into the first set of cells;
- (b) mutating a second set of haploid yeast cells to render defective the enzymatic mismatch repair system of the second set of cells and introducing a second DNA sequence into the second set of cells wherein the second DNA sequence is partially homologous to the first DNA sequence and has up to 30% base mismatches with the first DNA sequence;
 - (c) mixing the first and second sets of cells to form diploid yeast cells;
- (d) culturing the diploid yeast cells to effect meiosis of the diploid yeast cells wherein said meiosis results in hybrid yeast cells comprising a recombination of the partially homologous first and second DNA sequences, to make hybrid yeast cells; and
 - (e) recovering the hybrid yeast cells with recombined DNA sequences.
 - 56. (Canceled).
- 57. (Currently Amended) A process for obtaining <u>hybrid recombined</u> DNA sequences comprising:
 - (a) conducting the process according to claim 55 to make hybrid yeast cells; and
 - (b) isolating hybrid recombined DNA sequences of the hybrid yeast cells.
- 58. (Currently Amended) The process according to claim 57, wherein the hybrid recombined DNA sequences comprise a gene.

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59. (Currently Amended) A process for obtaining proteins encoded by hybrid recombined DNA sequences comprising:

- (a) obtaining the <u>hybrid recombined</u> DNA sequences according to the process of claim 57; and
 - (b) expressing proteins encoded by the hybrid recombined DNA sequences.
- 60. (Currently Amended) The process according to claim 59, wherein the hybrid recombined DNA sequences comprise a gene.

Claims 61-63 (Canceled).

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